A&I Coatings FAQ Sheet No. 16

Colour Variation in Coatings

1. What factors cause colour variation in coatings?

There are many factors that cause colour variation in coatings including…

a. Minor batch to batch variation in colour due to factors beyond the manufacturer's control.
b. Variation in light source (ie incandescent, fluorescent, halogen or natural light).
c. Variation in gloss level, even very minor will influence colour.
d. Variation in application method e.g. airless spray, air spray, brush, roller.
e. Variation in application technique even within a particular method.

2. How would these possibilities be minimized in a critical application like a facade?

Ideally all coatings for a critical elevation or façade would be applied with the following constants…

a. One batch of paint.
b. Absolutely consistent application technique.
c. The same clean spray gun and controlled pressure.
d. The same amount of thinners added.
e. The same film thickness.
f. The same temperature, or a controlled environment, for both application and cure.
g. All panels fastened in the same orientation as sprayed.

3. Why are metallic coatings especially susceptible to variables in application?

Metallic Coatings are especially susceptible to application technique because of the flip or alignment of the metallic flakes within the coating. These flakes give the coating a depth of color that is visually exciting, but also makes perfect color uniformity difficult. The viewing angle effect puts a premium on straight line installation. Panels that appear the same color when viewed in the same plane may look different if cocked only a few degrees out of level with each other. We have seen jobs where the most objectionable color variation was due solely to the installation process.

This all makes essential the minimization of the variables outlined above to achieve a satisfactory result.

This FAQ sheet provides some guidance that must be read along with the relevant Technical Data Sheets, and it depends on the contractor having a basic understanding of how to use the coatings described. For further assistance, contact A&I Coatings on 1800 819585, or email helpdesk@aicoatings.com